

What is claimed is:

1 1. A stereo image capture system, comprising:

2
3 a first digital camera for capturing a first image and including a first optical
4 axis and a first data port;

5
6 a second digital camera for capturing a second image and including a second
7 optical axis and a second data port,

8
9 the first and second data ports are adapted to intercommunicate data
10 including the first and second images between the cameras,

11
12 the first and second digital cameras are adapted to be linked with each other
13 so that the first and second optical axes are coplanar and parallel to each other and
14 are separated by a predetermined distance, and

15
16 wherein when the cameras are linked, the cameras are adapted to capture a
17 stereo image by capturing the first and second images.

1 2. The stereo image capture system of Claim 1, wherein the first digital camera
2 and the second digital camera are linked by connecting the first digital camera with
3 the second digital camera.

1 3. The stereo image capture system of Claim 2, wherein the data is
2 intercommunicated between the first and second data ports when the first digital
3 camera is linked with the second digital camera.

1 4. The stereo image capture system of Claim 1 and further comprising a data
2 port connector for linking the cameras and for connecting the first data port with the
3 second data port.

1 5. The stereo image capture system of Claim 4, wherein the data port connector
2 has a fixed length and the predetermined distance is varied by selecting the fixed
3 length of the data port connector.

1 6. The stereo image capture system of Claim 1 and further comprising a data
2 port connector that has an adjustable length and the predetermined distance is
3 varied by adjusting the length of the data port connector.

1 7. The stereo image capture system of Claim 6, wherein the predetermined
2 distance can be varied in a range from about 18.0 millimeters to about 80.0
3 millimeters.

1 8. The stereo image capture system of Claim 1, wherein the predetermined
2 distance is in a range from about 18.0 millimeters to about 80.0 millimeters.

1 9. The stereo image capture system of Claim 1, wherein when the first and
2 second digital cameras are linked the first and second data ports are in electrical
3 intercommunication with each other.

1 10. The stereo image capture system of Claim 9, wherein the data is electrically
2 intercommunicated using a communication protocol.

1 11. The stereo image capture system of Claim 10, wherein the communication
2 protocol is selected from the group consisting of a **JETSEND** protocol, an IEEE
3 1394 protocol, a **FIREWIRE** protocol, an USB protocol, a RS-232 protocol, and a
4 RS-422 protocol.

1 12. The stereo image capture system of Claim 1, wherein the first and second
2 data ports are in wireless intercommunication with each other when the first and
3 second digital cameras are linked.

1 13. The stereo image capture system of Claim 12, wherein the wireless
2 intercommunication is a selected one of optical intercommunication and radio
3 intercommunication.

1 14. The stereo image capture system of Claim 13, wherein the optical
2 intercommunication is effectuated using a selected one of an **IRDA** communication
3 protocol and a **JETSEND** communication protocol, and the radio intercommunication
4 is effectuated using a **BLUETOOTH** communication protocol.

1 15. The stereo image capture system of Claim 13, wherein either one or both of
2 the first and second data ports is adapted to receive extrinsic data transmitted from
3 a source external to either one of the first and second digital cameras.

1 16. The stereo image capture system of Claim 15, wherein the extrinsic data
2 comprises illumination data.

1 17. The stereo image capture system of Claim 1 and further comprising:

2 a first view finder mounted on the first digital camera; and

3 a second view finder mounted on the second digital camera,

4 the first and second view finders are spaced apart by an interpupillary
5 separation when the cameras are linked, and

6 wherein the first and second view finders are adapted to form a visual stereo
7 image that is representative of the stereo image captured by the first and second
8 digital cameras.

1 18. The stereo image capture system of Claim 17, wherein the first and second
2 view finders are a component selected from the group consisting of an optical view
3 finder, a through-the-lens optical view finder, and a micro-display view finder.

1 19. The stereo image capture system of Claim 17, wherein the first and second
2 view finders are movably mounted to the first and second digital cameras
3 respectively so that the interpupillary separation between the first and second view
4 finders can be adjusted to match a user specific variation in eye spacing.

1 20. The stereo image capture system of Claim 1, wherein one of the first and
2 second digital cameras is selectable to be a master camera and the other one of the
3 first and second digital cameras is a slave camera, and after the first and second
4 images have been captured, the image captured by the slave camera is
5 intercommunicated to the master camera so that the stereo image resides in the
6 master camera.

1 21. The stereo image capture system of Claim 20, wherein one or more identical
2 functions on the slave camera including the capturing of the second image is
3 controlled by the master camera.

1 22. The stereo image capture system of Claim 1, wherein the second digital
2 camera is flipped from a normal position to a linked position so that the second
3 digital camera can be linked to the first digital camera and so that the second data
4 port is in communication with the first data port when the cameras are linked.

1 23. The stereo image capture system of Claim 1, wherein the first data port is
2 replicated at least once on the first digital camera and the second data port is
3 replicated at least once on the second digital camera so that the first and second
4 digital cameras can be linked without having to flip either one of the cameras in
5 order to effectuate communication between the first and second data ports.

1 24. The stereo image capture system of Claim 1 and further comprising:
2
3 a first display positioned on the first digital camera and operative to display
4 information including the first image; and
5
6 a second display positioned on the second digital camera and operative to

7 display information including the second image, and

8

9 wherein the predetermined distance defines an interpupillary separation
10 between the first and second displays such that a user of the stereo image capture
11 system can view the stereo image.

1 25. The stereo image capture system of Claim 24, wherein the predetermined
2 distance can be varied in a range from about 18.0 millimeters to about 80.0
3 millimeters so that the interpupillary separation can be adjusted to match a user
4 specific variation in eye spacing.